

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/000020

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D295/08 C07D311/78 C07D335/04 C07D221/18 A61K31/4453  
A61K31/4523 A61K31/55 A61P15/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2004/009086 A (ELI LILLY AND COMPANY; DALLY, ROBERT, DEAN; DODGE, JEFFREY, ALAN; FRAN) 29 January 2004 (2004-01-29) page 9; compound IX page 51 preparation 17	1, 18, 29
X	EP 0 826 679 A (ELI LILLY AND COMPANY) 4 March 1998 (1998-03-04) claims 1, 12	1-36
X	EP 0 761 669 A (ELI LILLY AND COMPANY) 12 March 1997 (1997-03-12) claim 1 page 1, line 8 - line 13 example 15	1-36
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

18 May 2005

Date of mailing of the international search report

31/05/2005

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

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PCT/US2005/000020

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 895 989 A (ELI LILLY AND COMPANY) 10 February 1999 (1999-02-10) claim 1 page 2, paragraph 9 -----	1-36
Y	US 5 567 712 A (PALKOWITZ ET AL) 22 October 1996 (1996-10-22) column 1, paragraph 1 examples 4,5 -----	1-36
Y	EP 0 835 868 A (ELI LILLY AND COMPANY) 15 April 1998 (1998-04-15) page 5, line 37 claim 1 -----	1-36
Y	EP 0 835 867 A (ELI LILLY AND COMPANY) 15 April 1998 (1998-04-15) page 1, line 44 - line 45 claim 1 page 6, line 54 -----	1-36

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2005/000020

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 15 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2004009086	A	29-01-2004	AU 2003253129 A1 EP 1530470 A1 WO 2004009086 A1 WO 2004075894 A1	09-02-2004 18-05-2005 29-01-2004 10-09-2004
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## PCT REQUEST

Original (for SUBMISSION)

VIII-3-2	<b>Declaration: Entitlement to claim priority</b> Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)) Name	in relation to this international application  ELI LILLY AND COMPANY is entitled to claim priority of earlier application No. 60/538,442 by virtue of the following:
VIII-3-2(i v)		an assignment from DALLY, Robert, Dean to ELI LILLY AND COMPANY, dated 23 April 2004 (23.04.2004)
VIII-3-2(i v)		an assignment from FRANK, Scott, Alan to ELI LILLY AND COMPANY, dated 23 April 2004 (23.04.2004)
VIII-3-2(i v)		an assignment from WALLACE, Owen, Brendan to ELI LILLY AND COMPANY, dated 23 April 2004 (23.04.2004)
VIII-3-2(i v)		an assignment from HINKLIN, Ronald, Jay to ARRAY BIOPHARMA, INC., dated 22 June 2004 (22.06.2004)
VIII-3-2(i v)		an assignment from ARRAY BIOPHARMA, INC. to ELI LILLY AND COMPANY, dated 25 June 2004 (25.06.2004)
VIII-3-2(i x)	This declaration is made for the purposes of:	AP: (BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW ); EA: (AM AZ BY KG KZ MD RU TJ TM ); EP: (AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR ); OA: (BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG ); AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH&LI CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

## PCT REQUEST

Original (for SUBMISSION )

VIII-2-1	<p><b>Declaration: Entitlement to apply for and be granted a patent</b>  Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:  Name (LAST, First)</p>	<p>in relation to this international application</p> <p>ELI LILLY AND COMPANY is entitled to apply for and be granted a patent by virtue of the following:</p>
VIII-2-1(i)		ELI LILLY AND COMPANY is entitled as employer of the inventor, DALLY, Robert, Dean
VIII-2-1(i)		ELI LILLY AND COMPANY is entitled as employer of the inventor, DODGE, Jeffrey, Alan
VIII-2-1(i)		ELI LILLY AND COMPANY is entitled as employer of the inventor, FRANK, Scott, Alan
VIII-2-1(i)		ELI LILLY AND COMPANY is entitled as employer of the inventor, SHEPHERD, Timothy, Alan
VIII-2-1(i)		ELI LILLY AND COMPANY is entitled as employer of the inventor, WALLACE, Owen, Brendan
VIII-2-1(i)	This declaration is made for the purposes of:	all designations except the designation of the United States of America



## PCT REQUEST

Original (for SUBMISSION)

VIII-3-1	<p><b>Declaration: Entitlement to claim priority</b>  Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))</p> <p>Name</p>	<p><b>in relation to this international application</b></p> <p>ELI LILLY AND COMPANY  is entitled to claim priority of earlier application No. 60/538,342 by virtue of the following:</p>
VIII-3-1(i) v)		an assignment from DALLY, Robert, Dean to ELI LILLY AND COMPANY, dated 23 April 2004 (23.04.2004)
VIII-3-1(i) v)		an assignment from DODGE, Jeffrey, Alan to ELI LILLY AND COMPANY, dated 22 April 2004 (22.04.2004)
VIII-3-1(i) v)		an assignment from SHEPHERD, Timothy, Alan to ELI LILLY AND COMPANY, dated 23 April 2004 (23.04.2004)
VIII-3-1(i) v)		an assignment from WALLACE, Owen, Brendan to ELI LILLY AND COMPANY, dated 23 April 2004 (23.04.2004)
VIII-3-1(i) x)	This declaration is made for the purposes of:	AP: (BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW ); EA: (AM AZ BY KG KZ MD RU TJ TM ); EP: (AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR ); OA: (BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG ); AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH&LI CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW